

Claim Amendments

19. (Currently Amended) A recombinant α -N-acetylglucosaminidase or a fragment or derivative thereof having α -N-acetylglucosaminidase activity or derivative thereof wherein said α -N-acetylglucosaminidase or fragment or derivative thereof hydrolyzes α -N-acetylglucosamine residues from the non-reducing terminus of heparan sulphate and wherein the recombinant α -N-acetylglucosaminidase comprises at least one of an amino acid sequence as set forth in SEQ ID NO:2, an amino acid sequence having at least 80% sequence identity to the amino acid sequence set forth in SEQ ID NO:2 or an amino acid sequence encoded by a polynucleotide capable of hybridizing to SEQ ID NO:1 or SEQ ID NO:3 under high stringency conditions.

20. (Previously Presented) The recombinant α -N-acetylglucosaminidase according to claim 19 in pure form relative to non α -N-acetylglucosaminidase material as determined by weight, activity, amino acid homology or similarity, antibody reactivity or other convenient means.

21. (Previously Presented) The recombinant α -N-acetylglucosaminidase according to claim 19 when expressed in mammalian, yeast or insect cells.

22. (Previously Presented) The recombinant α -N-acetylglucosaminidase according to claim 21 when expressed in mammalian cells.

23. (Previously Presented) The recombinant α -N-acetylglucosaminidase according to claim 21, wherein the cells are capable of glycosylating said recombinant α -N-acetylglucosaminidase.

24. (Currently Amended) The recombinant α -N-acetylglucosaminidase according to claim [[23]] 22 wherein the cells are capable of N-glycosylating said recombinant α -N-acetylglucosaminidase.

25. (Previously Presented) The recombinant α -N-acetylglucosaminidase according to claim 24 wherein the cells are CHO cells.

26. (Previously Presented) The recombinant α -N-acetylglucosaminidase according to claim 19 wherein said recombinant α -N-acetylglucosaminidase is in a glycosylated form.

27. (Previously Presented) The recombinant α -N-acetylglucosaminidase according to claim 26 wherein the molecular weight of the glycosylated form as determined using SDS/PAGE is at least approximately 79 kDa.

28. (Original) The recombinant α -N-acetylglucosaminidase according to claim 26 wherein the molecular weight of the glycosylated form as determined using SDS/PAGE is at least approximately 79 kDa to 89 kDa.

29. (Currently Amended) The recombinant α -N-acetylglucosaminidase according to claim 19 comprising ~~a sequence of amino acids corresponding to human α -N-acetylglucosaminidase~~ an amino acid sequence as set forth in SEQ ID NO:2.

30. (Previously Presented) The recombinant α -N-acetylglucosaminidase according to claim 19 when fused to another proteinaceous molecule.

31. (Previously Presented) The recombinant α -N-acetylglucosaminidase according to claim 30 wherein the other proteinaceous molecule is an enzyme, reporter molecule, purification moiety and/or a signal sequence.

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Currently Amended) A recombinant α -N-acetylglucosaminidase or a fragment thereof having α -N-acetylglucosaminidase activity produced by expression of a nucleic acid

molecule which encodes or is complementary to a sequence which encodes an α -N-acetylglucosaminidase or fragment or derivative thereof having α -N-acetylglucosaminidase activity, wherein said recombinant α -N-acetylglucosaminidase or fragment or derivative thereof hydrolyzes α -N-acetylglucosamine residues from the non-reducing terminus of heparan sulphate, wherein the recombinant α -N-acetylglucosaminidase comprises at least one of an amino acid sequence as set forth in SEQ ID NO:2, an amino acid sequence having at least 80% sequence identity to the amino acid sequence set forth in SEQ ID NO:2, or an amino acid sequence encoded by a polynucleotide capable of hybridizing to SEQ ID NO:1 or SEQ ID NO:3 under high stringency conditions and wherein the molecule is carried by a vector capable of replication in a eukaryotic or prokaryotic cell.

36. (Original) The recombinant α -N-acetylglucosaminidase according to claim 35 when glycosylated.

60. (Currently Amended) A pharmaceutical composition comprising a recombinant α -N-acetylglucosaminidase or an a fragment or derivative thereof having α -N-acetylglucosaminidase activity and one or more pharmaceutically acceptable carriers and/or diluents wherein said α -N-acetylglucosaminidase or fragment or derivative thereof hydrolyzes α -N-acetylglucosamine residues from the non-reducing terminus of heparan sulphate, wherein the recombinant α -N-acetylglucosaminidase comprises at least one of an amino acid sequence as set forth in SEQ ID NO:2, an amino acid sequence having at least 80% sequence identity to the amino acid sequence set forth in SEQ ID NO:2, or an amino acid sequence encoded by a polynucleotide capable of hybridizing to SEQ ID NO:1 or SEQ ID NO:3 under high stringency conditions.

61. (Currently Amended) The pharmaceutical composition according to claim 60 wherein the recombinant ~~mammalian~~ α -N-acetylglucosaminidase comprises ~~a sequence of amino acids corresponding to human α -N-acetylglucosaminidase an amino acid sequence as set forth in SEQ ID NO:2.~~

62. (Previously Presented) The pharmaceutical composition according to claim 60 wherein the recombinant α -N-acetylglucosaminidase is produced in a mammalian cell.

63. (Previously Amended) The pharmaceutical composition according to claim 62 wherein the mammalian cell is a CHO cell line which is capable of glycosylating the recombinant α -N-acetylglucosaminidase.

64. (Original) The pharmaceutical composition according to claim 60 wherein the α -N-acetylglucosaminidase is glycosylated.

65. (Previously Presented) The pharmaceutical composition according to claim 64 wherein the recombinant α -N-acetylglucosaminidase has a molecular weight as determined using SDS/PAGE of at least approximately 79 kDa.

66. (Original) The pharmaceutical composition according to claim 65 wherein the recombinant α -N-acetylglucosaminidase has a molecular weight as determined using SDS/PAGE of approximately 79 kDa to 89 kDa.

67. (Cancelled)

68. (Cancelled)

69. (Cancelled)

70. (Cancelled)

71. (Cancelled)

85. (Cancelled)

96. (**Cancelled**)

97. (**Cancelled**).

98. (**Cancelled**).

99. (**Cancelled**)